## REMARKS

Claims 1-25 are pending in this application. Claims 1-25 have been amended in several particulars for purposes of clarity and brevity that are unrelated to patentability and prior art rejections in accordance with current Office policy, to further and alternatively define Applicant's disclosed invention and to assist the Examiner to expedite compact prosecution of the instant application.

Claims 1-7, 9-20, 24 and 25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Lichtman et al., U.S. Patent No. 5,819,107, as modified to incorporate selected features from Alexander et al., U.S. Patent No. 6,151,684 for reasons stated on pages 2-4 of the Office Action (Paper No. 2). Specifically, the Examiner asserts that Lichtman '107, as a primary reference, discloses,

> "a Driver (Driver Loading Module 25 Col. 15 Ln. 35-53), a Host (Computer System 8 Col. 15 Ln. 1-67), a Verification Message (Arbitration Module 34 Col. 15 Ln. 38-53, Step 38 Col. Ln 15-27), a Communication Channel (Resource 14 Col. 15 Ln. 1-53) and loading the driver (Driver Loading Module 35 Col. 15 Ln. 35-53)."

The Examiner then cites Alexander '684 for simply disclosing the use of a host and an I/O enclosure in the context of a fabric in order to support an assertion that "it would have been obvious to apply the teachings of Alexander to the system of Lichtman ... to provide a fault tolerant SAN system."

This rejection is respectfully traversed, however. Applicant respectfully submits that novel features of Applicant's independent claims 1, 6, 13 and 20 are not disclosed or suggested by Lichtman '107 and Alexander '684, whether taken individually or in combination with any other references of record. Therefore,

Applicants respectfully request the Examiner to reconsider and withdraw this rejection for the following reasons.

Independent claims 1, 6, 13 and 20, as amended, define a system, method and Beauregard tangible medium containing instructions for loading a driver for a corresponding fabric-attached I/O controller (I/O resource) into a host for fabric communication with such a fabric-attached I/O, via an interconnection fabric (network). For example, method claim 1, as amended, defines a method of loading a driver in a host coupled to an interconnection fabric including one or more fabric-attached I/O enclosures, comprising:

> assigning an I/O controller that is within an I/O enclosure to the host;
> before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure, via the interconnection fabric, to determine whether a communication path exists to the I/O controller within the I/O enclosure; and
> if the I/O enclosure responds to the verification message, then loading the driver into the host.

Independent claims 6 and 13, as amended, define a method and a tangible medium storing a plurality of program instructions, which, when executed by a processor, causes the processor to perform the following:

> assigning a plurality of I/O controllers that are within a plurality of I/O enclosures to a plurality of hosts;
> determining a list of drivers that correspond to the plurality of I/O controllers to be loaded into the plurality of hosts;
> before loading the drivers into the plurality of hosts, for each driver, sending a verification message to the I/O controller that corresponds to the driver; and
> modifying the list of drivers if a response to any of the verification messages has been received.

Alternatively, independent claim 20, as amended, defines a network arrangement comprising:

> an interconnection fabric;
> a host comprising an operating system and at least a host-fabric adapter provided to interface with the interconnection fabric; and
> an I/O enclosure including at least one fabric-attached I/O controller assigned to the host and attached to the interconnection fabric;
> wherein the operating system within the host is configured to determine if the host-fabric adapter has been initialized for fabric communication and, then to load a driver that corresponds to the fabric-attached I/O controller assigned to the host, into the host for communication with the fabric-attached I/O controller, via the interconnection fabric.

As expressly defined in each of Applicant's independent claims 1, 9, 13 and 20, a network of hosts and I/O resources that are connected together by an interconnection fabric is defined along with a procedure that can be used to delay the loading of a host driver that corresponds to a particular fabric-attached I/O resource (i.e., I/O controller) until the host-fabric adapter installed in the host is initialized (active) for fabric communication. Otherwise, such a driver that loads into the host will immediately attempt to communication with the corresponding fabric-attached I/O resource (i.e., I/O controller), via an interconnection fabric, and fail because the host-fabric adapter installed in the host has not yet been initialized and connected to the interconnection fabric.

In contrast to Applicant's independent claims 1, 6, 13 and 20, Lichtman '684, as a primary reference, discloses nothing more than a typical stand-alone computer system as shown in FIG. 1, which utilizes a computer control system 21 to control I/O resources such as peripheral devices, including a configuration system shown in

FIG. 2, to assign appropriate device drivers to corresponding peripheral devices of such a computer system without user intervention.

However, there is **no** disclosure anywhere from Lichtman '107 of Applicant's claimed "method of loading a driver in a host coupled to an interconnection fabric including one or more fabric-attached I/O enclosures" as expressly defined in each of Applicant's independent claims 1, 6, 13 and 20. More importantly, there is **no** disclosure anywhere from Lichtman '107 of Applicants' claimed procedure that can be used to delay the loading of a host driver that corresponds to a particular fabric-attached I/O resource (i.e., I/O controller) until the host-fabric adapter installed in the host is initialized (active) for fabric communication.

As a secondary reference, Alexander '684 discloses only the concept of an SAN computer system architecture including a plurality of hosts and I/O devices that are connected in a system area network (SAN). No disclosure anywhere in Alexander '684 of Applicant's claimed procedure that can be used to delay the loading of a host driver that corresponds to a particular fabric-attached I/O resource (i.e., I/O controller) until the host-fabric adapter installed in the host is initialized (active) for fabric communication.

There is **no** suggestion any where in either Lichtman '107 or Alexander '684 that the configuration system as shown in FIG. 2 of Lichtman '107, that is used to assign appropriate device drivers to corresponding peripheral devices of such a computer system without user intervention can be extended to a system area network (SAN) of a plurality of hosts and I/O devices as described by Alexander '684. Even assuming *arguendo* that the configuration system of Litchman '107 can

be extended to the system area network (SAN) disclosed by Alexander '684, the problem as identified by Applicant in the background of his invention will arise. In other words, once loaded into the host, a typical driver will immediately attempt to communication with the corresponding fabric-attached I/O resource (i.e., I/O controller), via an interconnection fabric. However, if the host-fabric adapter installed in the host has not yet been initialized and connected to the interconnection fabric, such an attempt by the driver to communicate with the corresponding fabric-attached I/O resource, via the interconnection fabric, will be futile and useless. As a result, Applicant's invention is intended to address this problem, that is, to outline a procedure that can be used to delay the loading of a host driver that corresponds to a particular fabric-attached I/O resource (i.e., I/O controller) until the host-fabric adapter installed in the host is initialized (active) for fabric communication.

The law under 35 U.S.C. §103 is well settled. In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and **not** based on Applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 2143. In other words, all the claim limitations must be taught or suggested by the prior art.

In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USQP 494, 496 (CCPA 1970).

In the present situation, neither Litchman '107 nor Alexander '684, whether taken individually or in combination, fails to disclose and suggest novel features of Applicant's independent claims 1, 6, 13 and 20. Therefore, Applicant respectfully requests that the rejection of claims 1-7, 9-20, 24 and 25 be withdrawn.

Lastly, claims 8 and 21-23 have been rejected under 35 U.S.C. §103 as being unpatentable over Lichtman '107, in view of Alexander '684 as applied to claim 21 above, and further in view of Wallach U.S. Patent No. 6,499,073 for reasons stated on pages 4-5 of the Office Action (Paper No. 2). Since the correctness of this rejection is predicated upon the correctness of the rejection of Applicant's claims 1-7, 9-20, 24 and 25, Applicant respectfully requests that the rejection of claims 8 and 21-23 be withdrawn for the same reasons discussed against the rejection of Applicant's claims 1-7, 9-20, 24 and 25.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC area office at (703) 312-6600.

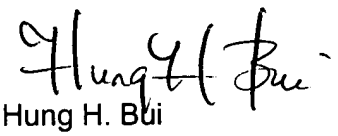
**INTERVIEW:**

Again, in the interest of expediting prosecution of the present application,

Applicant respectfully requests that an Examiner interview be scheduled and conducted. In accordance with such interview request, Applicant respectfully requests that the Examiner, after review of the present Amendment, contact the undersigned local Washington, D.C. area attorney at the local Washington, D.C. telephone number (703) 312-6600 for scheduling an Examiner interview, or alternatively, refrain from issuing a further action in the above-identified application as the undersigned attorneys will be telephoning the Examiner shortly after the filing date of this Amendment in order to schedule an Examiner interview. Applicant thanks the Examiner in advance for such considerations. In the event that this Amendment, in and of itself, is sufficient to place the application in condition for allowance, no Examiner interview may be necessary.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (Case No. 219.38572X00) and please credit any excess fees to such deposit account.

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP



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